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ABSTRACT

Previous explanations of teen pregnancy have often included uncritical use of the notion of adolescents "at risk." More recently, however, attention has shifted to structurally determined contextual factors to explain teen pregnancy. Such factors include economic and educational opportunities and costs, as well as chances for valued participation in socially and culturally stable communities. This interest in contextual factors parallels a development in the literature on high school dropouts. A West Virginia data set previously employed to study school district variability in high school completion rates was analyzed to determine if teen pregnancy rates followed a pattern seen with dropout rates. As expected, births per thousand females aged 15-19 was negatively related to average wages and positively related to school district size. Unexpectedly, the teenage birth rate was negatively related to the percentage of students receiving free and reduced-cost lunches, suggesting that this measure of disadvantagement is a proxy for traditional community norms and practices. Teenage birth rate was not related to average unemployment or college enrollment rates. Results suggest that commonplace explanations of teen pregnancy in Appalachia are simply wrong. Rather than being a manifestation of welfare dependency and a debilitating culture of poverty, teen pregnancy reflects an absence of opportunity and the decline of traditional community patterns. Further, as traditionally small schools are replaced by larger schools where a sense of valued membership and participation are harder to find, teen pregnancy becomes still more likely. Contains 7 tables and 46 references. (Author/SV)

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OPPORTUNITY, COMMUNITY, AND TEEN PREGNANCY IN AN APPALACHIAN STATE

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ABSTRACT

Teen pregnancy has become an issue which educators and public policymakers are obliged to treat as a serious problem. Too often, explanations of teen pregnancy have included uncritical use of the notion of adolescents "at-risk." More recently, however, attention has been given to structurally determined contextual factors in explaining teen pregnancy. Such contextual factors include economic and educational opportunities and costs, as well as chances for valued participation in socially and culturally stable communities. This interest in contextual factors parallels a development in the literature on high school dropouts. We use a data set previously employed to study variability in dropout rates among school districts in the Appalachian state of West Virginia. We conclude that teen pregnancy can be explained in much the same way as dropping out. Explanation in terms of contextual factors helps to avoid the victim-blaming accounts associated with the notion of teenagers "at-risk."

The adolescent birthrate in the United States is remarkably high compared with other industrialized nations. The rate in Sweden is 35 per 1000 females aged 15 to 19. In Canada the same rate is 44 per 1000. While the United States leads all developed nations with an adolescent birthrate of 96 per 1000. Approximately one million teenaged women in the U.S. become pregnant each year (Johnson, 1989).

There is a good deal of controversy concerning the presence, absence, and nature of adverse social, economic, and educatonal consequences caused by teen pregnancy and teen births (see, for example, the exchange between Caldas, 1994 and Males, 1994). The alternative to the commonplace view that teen pregnancy has debilitating effects for young women and their babies, is that it merely looks that way because its incidence is closely associated with socioeconomic status (Boyer and Fine, 1992; Males, 1993; Knoke and Bohrnstedt, 1994: 24-25).

Thus, an adolescent female in an affluent family has access to social and economic resources which minimize the life-course disruptions caused by teen pregnancy or becoming a teenaged mother. Similarly, an adolescent female from a less-advantaged family has limited prospects with or without teen pregnancy. The same prospects hold

for her children, born in or out of wedlock (Scott-Jones, 1993).

While the debate concerning the effects of teen pregnancy for young mothers, their offspring, and American society continues; teen pregnancy has emerged as a distinct issue that educators and policymakers feel obliged to treat as a serious problem. Teen pregnancy prevention programs, focusing on ostensibly "at-risk" adolescent females, are now nearly as commonplace as drop-out prevention programs aimed at adolescents of both sexes (Astroth, 1994). Invoking the ubiquitious, too-often unquestioned, notion of adolescents "at-risk," however, raises an interesting question: How to account for variability in teen pregnancy from time to time and place to place.

EXPLANATIONS OF TEEN PREGNANCY

As just noted, explanations of variability in teen pregnancy often focus on "at-risk" characteristics of individuals and families. These include factors such as income, ethnicity, and parents' education (Dryfoos, 1990).

More recently, however, attention has been given to the importance of contexutal factors in accounting for variation in teen pregnancy and births to adolescent women (Billy and Moore, 1992; Brewster, Billy, Grady, 1993; Ku,

Sonenstein, and Pleck, 1993). In this way, variables such as structurally determined economic and educational opportunities, and factors which counter or exacerbate the normative uncertainty and social instability which accompany modern life, can be systematically incorporated into empirical explanations.

PARALLELS BETWEEN TEEN PREGNANCY AND DROPPING OUT

A similar literature has appeared with regard to another "at-risk" behavior associated with the same age group, though not limited to females: dropping out of high school. In previous work on dropouts, we found that high school completion rates in both Florida and West Virginia varied with structurally determined contextual factors, which we interpreted as anticipated economic and educational opportunities and social and psychological costs (Papagiannis, Bickel, and Fuller, 1983; Bickel and Papagiannis, 1988; Bickel, 1989a and 1989b; Bickel and Lange, 1994; also see Stinchombe, 1964; Yotopoulos and Nugent, 1976; Willis, 1981; Fine; 1986).

Specifically, as economic and postsecondary educational payoffs for earning a high school diploma increase, high school completion rates increase. As these same payoffs decrease, high school completion rates also decrease.

In a perhaps unself-conscious way, high school students seem to ask themselves if a diploma makes any difference with regard to their prospects. If it does not, they may have little or no incentive to stay in school.

In addition, high school completion rates vary directly with the social and psychological costs of staying in school. Costs identified in earlier work are associated with being placed in a devalued curriculum track; belonging to a devalued racial or ethnic minority group; and attending a large high school with a high student/teacher ratio (Papagiannis, Bickel and Fuller, 1983; Bickel, 1989a; Bickel and Lange, 1994; also see Friedkin and Necochea, 1988).

One way to interpret these earlier findings regarding costs is to say that dropping out varies not only with anticpated payoffs, but also with a sense of valued participation in a socially and culturally stable community. High school students who have a valued place and a positive sense of affiliation with their peers and teachers are less likely to drop out than others (Bryk and Thum, 1989). Community diminishes the costs of participation.

TEEN PREGNANCY IN WEST VIRGINIA

Do teen pregnancy rates vary with the same factors and in the same way as dropout rates? In the following analysis we use a data set which we previously employed to study district-to-district variability in high school completion rates in West Virginia (Bickel, 1989a; Bickel and Lange, 1994). This work was, in the first instance, a near-replication of research done with Florida data, which had yielded similar results with regard to the connections between opportunities and costs, and high school completion rates (Bickel and Papagiannis, 1988; Bickel, 1989b).

The unit of analysis is the school district. School districts in West Virginia are coterminous with the state's fifty-five counties, facilitating the matching of education measures with social and economic measures produced by state agencies. Data are for the school year 1987-88.

All variables used in the analysis are defined in Table 1. Descriptive statistics are reported in Table 2.

TABLE 1 ABOUT HERE

TABLE 2 ABOUT HERE

ECOLOGICAL INFERENCE

All our variables are based on data which has been aggregated to the school district level. Therefore, this is inevitably an exercise in ecological inference. This raises the possibility that we will make fallacious inferences about individuals from aggregated data (see the classic statement by Robinson, 1950.)

To guard against this, we have sought to specify our regression equations to include an adequate complement of controls (Langbein and Lichtman, 1978). In this way, we hope to justify making inferences from contextual factors to individual behavior (Fitzpatrick and Yoels, 1992).

Nevertheless, it is clearly a limitation of our analysis that the only effects we can investigate are contextual effects. Investigation of contextual effects

can be a valuable strategy, and one that is too often neglected (Miethe and McDowall, 1993). But the absence of complementary individual-level data is an undeniable constraint (Blalock, 1982: 247-251). (For further discussion of use of this data set for ecological inference, see Bickel and Papagiannis, 1988 and Bickel, Banks, and Spatig, 1991).

FOCUS ON FEMALES

In addition, the focus throughout this paper is on the responses of female adolescents to opportunities, costs, and community. The assumption which justifies this focus is that adolescent women are the ones whose responses to structurally determined contextual factors will be most important in determining the rate of teen pregnancy and birth.

The rationale for this is that insofar as opportunities, costs, and the social and psychological resources of community play a role in determining teen pregnancy, these factors will be experienced much more strongly and directly by females. They, after all, are the ones who cannot simply ignore being pregnant.

Obviously, however, this discounts the efficacy of sex education for males, and ignores numerous other important factors which might help to explain variation in males' participation in contributing to teen pregnancy (Ku, Sonnenstein, and Pleck, 1993). So, while there is a more or less plausible rationale for our approach, we are also constrained by limitations of our data.

THE OUTCOME MEASURE

Births per thousand females aged 15 to 19 is used as a proxy for pregnancies per unwed females in the same age range. Information concerning this latter variable is not available.

Certainly, by proceeding in this way, we introduce measurement error in the dependent variable into our analysis. After all, not all teenaged mothers are unmarried, and not all teen pregnancies result in births. Nationally, in fact, 15 percent of teen pregnancies result in miscarriage, while 40 percent are voluntrailly terminated (Turner and Helms, 1992).

Further, women who become pregnant in one geographical area may give birth in another. Nevertheless, given the nature of our aggregated data, this is a limitation which we will have to accept.

We are assuming, however, that measurement error in the outcome measure is random, leaving the partial regression coefficients unbiased, though their standard errors may be inflated (Berry and Feldman, 1985). In view of the fact that we are working with just one, homogeneously Appalachian state, the assumption of random measurement error is more plausible than otherwise would be the case (Blalock, 1982: 252-259).

INDEPENDENT VARIABLES

As explained above, the independent variables were selected under the tentative assumption that teenaged pregnancy can be explained in much the same terms as dropping out of high school. Concretely, this means that just as adolescents need incentives and social resources to stay in school, they also need incentives and social resources to avoid becoming pregnant (Scott-Jones, 1991). For an adolescent, avoiding becoming pregnant, much as staying in school, is an investment in a valued future. If likely prospects are much the same whether one becomes pregnant or not (or drops out of high school or not), teen pregnancy (as with dropping out) becomes more likely.

The independent variables have been divided into five categories (see Table 1). Independent variables corresponding to economic opportunities and postsecondary educational opportunities are clearly labeled.

In line with previous work on dropouts, as cited above, social and psychological costs will correspond to socially and economically unfavorable values on the remaining independent variables. This is, however, an admittedly vague formulation.

Specific costs identified in earlier work, as already noted, include being placed in a devalued curriculum track; being a member of a devlaued ethnic minority group; and attending a large school with a high student/teacher ratio (Papagiannis, Bickel and Fuller, 1983; Bickel, 1989a; Bickel and Lange, 1994).

DETERMINANTS OF VARIABILITY IN TEEN BIRTHS IN WEST VIRGINIA

In Table 3 we see multiple regression results obtained using births per thousand females aged 15 to 19 as our outcome measure, with our full complement of independent variables. Three of the independent variables have statistically significant regression coefficients: average job wage in thousands of dollars (WAGE), number of students per district in thousands (STUDENTS), and percent of students receiving free or reduced-cost lunch (DISADVAN).

TABLE 3 ABOUT HERE

Two of the independent variables, WAGE and STUDENTS, work as expected. WAGE and the incidence of teen pregnancy vary inversely. This is consistent with the claim that young women who live in areas where economic opportunities are comparatively lucrative are more likely to perceive incentives to avoid teen pregnancy. When opportunities are comparatively limited, incentives to avoid teen pregnancy are missing.

The statistically significant and positive coefficient corresponding to STUDENTS indicates that the number of students in the school district and the rate of teen pregnancy rise and fall together. This is consistent with the claim that as schools and school districts become larger, they also become less able to provide a sense of valued participation in a socially and culturally stable community, and teen pregnancy becomes more likely.

Young women who have a valued place and a positive sense of affiliation with their peers and teachers are less likely to become pregnant than others (see Oakes, 1985). Community diminishes the social and psychological costs of

participating in school and in the everyday world (Campbell and Lee, 1992).

Clearly, school district size, though it yields the regression results we had anticipated, is a crude proxy for school-as-community. It is useful to recall, however, that Bryk and Thum (1989) found strong positive correlations between school size and the incidence of tracking, discipline problems, and staff absenteeinsm and morale. Though district size is far from ideal, it seems to be a useful surrogate for school-as-community, and this may be especially true for low SES students (Friedkin and Necochea, 1988).

DISADVAN: AN ANOMALOUS FINDING

The statistically significant and negative regression coefficient corresponding to DISADVAN was unexpected. It is difficult to see why the incidence of teen pregnancy should vary inversely with a coarse-grained socio-economic status indicator such as the percentage of students receiving free and reduced-cost lunches. Using DISADVAN as an indicator of the prevailing socio-economic status of school districts would lead us to expect a direct relationship with teen pregnancy rates, not an inverse one.

Conventionally, disadvantaged economic circumstances and teen pregnancy are expected to rise and fall together (National Center for Health Statistics, 1988; Knoke and Bohrnstedt, 1994: 24-25). How do we explain this departure from commonplace expectations?

MODERNITY AND COMMUNITY

One way to interpret our finding with regard to DISADVAN is to think in terms of the characteristics of traditional West Virginia communities. Geographically they have been small and rural. Extended families have persisted. Racially and ethnically they have been homogenous, made up almost exclusively of native-born Whites. Educationally and occupationally they have been marked by low levels of attainment. College enrollment rates have been low, though high school dropout rates have not been higher than the U.S. average (Fitzpatrick and Yoels, 1992). Permanent migration out of the area in search of improved employment prospects has been a near-last resort response to economic necessity (Bickel, Arthur, and Spatig, 1993; Spatig and Bickel, 1993; Fleishman, 1994).

In Table 4, moreover, we find that DISADVAN has a statistically significant and negative bivariate correlation with average level of educational attainment (EDAVG), percentage of the district's population which is

Black (BLACK), percentage of the district's population which is neither Black nor White (ETHNIC), percentage of students who enroll in a college or university after graduation from high school (MATRIC), the percentage of high school students enrolled in a college perparatory program (COLLPREP), and percentage of the district population which is urban (URBAN).

TABLE 4 ABOUT HERE

DISADVAN, it seems reasonable to surmise, is a proxy for traditonal community norms and practices. In West Virginia, as elsewhere, traditional social relations are being replaced by shifting labor market relations (Humphries, 1977; Fleishman, 1994), a process often characterized as inevitable and, for the long term, often claimed to be a desirable part of the process of becoming modern (Inkeles and Smith, 1974).

In our analysis, DISADVAN and modern patterns of social organization vary inversely. DISADVAN and traditional community characteristics rise and fall together (see Petee and Kowalski, 1993).

DISADVAN AS AN OUTCOME MEASURE

Pursuing this observation, we use DISADVAN as an outcome measure, along with EDAVG, URBAN, BLACK, ETHNIC, MATRIC, and COLLPREP -- indicators of departures from traditional patterns of community organization and composition -- as independent variables. These six independent variables account for 57.1 percent of the variance in DISADVAN, but only one, COLLPREP, corresponds to a statistically significant regression coefficient.

TABLE 5 ABOUT HERE

The former finding, a large adjusted R-squared value, is consistent with our judgment that DISADVAN is an unexpected proxy for traditonal patterns of community organization and composition. The latter finding, only one of the indicators of modernity having a statistically significant regression coefficient, seems best construed as a minifestation of multicollinearity.

Note that all of the standardized partial regression coefficients in Table 5 are much smaller than the bivariate correlation coefficients reported in Table 4, and the sign

of one regression coefficient, corresponding to ETHNIC, has changed from positive to negative.

This confluence of seemingly inconsistent statistical results is what we expect when multicollinearity is sufficiently serious to inflate standard errors (Wittink, 1988). This seems to account for a large adjusted R-squared occurring even though only one of six independent variables has a statistically significant regression coefficient (Chatterjee and Price, 1977).

MODERN PATTERNS OF ORGANIZATION AS A PRINCIPAL COMPONENT

Consequently, we continue to investigate the notion that correlates of DISADVAN are indicators of departures from traditional patterns of social organization and composition, with the principal components results reported in Table 6.

TABLE 6 ABOUT HERE

The first principal component (here labeled FACTOR 1) explains 43.1 percent of the total variation in the set of six variables which we are construing to be indicators of departures from traditional patterns of community social

organization and composition in West Virginia counties. Further, we see that all of the variables have positive loadings on FACTOR 1. If we adopt the widely used convention of including each variable with a loading of .30 or greater in interpreting the component, the results seem substantively consistent with the claim that this component represents a single dimension, which can be construed in the terms we are using.

Moreover, even if we adopt the more stringent, sample size-dependent criterion presented by Stevens (1993: 382-384) concerning retention of variables in interpreting principal components, all but one of the six variables, EDAVG, would be retained. Thus, interpretation of the first principal component would seem to be the same.

The second component (labeled FACTOR 2) does not readily lend itself to substantive interpretation, and explains only 17.3 percent of the variation in the set of six variables. None of the other components have eigenvalues of one or greater, and they have been deleted.

Given that the first component seems legitimately understood as representing modern patterns of community organization, while the other components explain little of the variation in the data and are difficult to interpret, we will use only the first component in subsequent

analyses. (For a nonformal statistical justification for this decision, see Kennedy, 1985: 154). This component, as already noted, is used to represent modern patterns of community organization and composition.

One might argue that we could also have used average job wage (WAGE) and number of students in the school district (STUDENTS) in our principal components analysis. However, substantively and statistically it seems to make more sense to interpret WAGE and STUDENTS as representing prevailing levels of economic opportunity and chances for participation as a valued member in a school community. Each of these variables had a statistically significant regression coefficient in the regression analysis which used births per thousand teenaged females as the outcome measure. They worked as anticipated and their interpretation seems straightforward.

REVISED ANALYSIS FOR TEEN BIRTHS IN WEST VIRGINIA

In Table 7 we have again used births per thousand teenaged females in each school district as the outcome measure. The independent variables are those which were incorporated in the regression analysis reported in Table 3, except that EDAVG, BLACK, ETHNIC, MATRIC, COLLPREP, and URBAN are now represented by the principal component MODERN (referred to above as FACTOR 1).

Both WAGE and STUDENT still have statistically significant regression coefficients. Births to teenaged mothers vary inversely with WAGE and directly with STUDENTS. As explained in the foregoing, this is what we would expect, with WAGE construed as an anticpated opportunity, and STUDENTS interpreted as a measure of school-as-community, or departures from same. The results, in short, are as expected, and they lend themselves to a substantive interpretation which parallels that for high school completion rates.

Further, the variable MODERN, our first principal component, also has a positive and statistically significant regression coefficient. As the value of MODERN increases, the teenaged birth rate also increases. MODERN, again, is being used here to represent departures from traditonal patterns of community organization. Our provisional claim is that the decline of opportunites for community membership and participation, out of school as well as in school, increases the social and psychological costs of everyday life. As we would expect, MODERN and teenaged birth rates rise and fall together.

LIMITATIONS AND CAUTIONARY OBSERVATIONS

It is important to recognize, however, that two of the variables which we had expected to contribute to explaining variability in teen pregnancy did not work as expected. Average unemployment rate (EMPLOY) was expected to vary directly with our outcome measure, and college enrollment rate (MATRIC) was expected to vary inversely with the outcome measure. As we have seen in the analyses already reported, however, both variables had non-significant partial regression coefficients. These failures seem clearly to be limitations of our analysis and our conceptual framework, especially since MATRIC subsequently became a constituent of our modernity component.

Further, examination of a correlation matrix (not reported here) for all variables in the analysis shows that our outcome measure, births per thousand teenaged females (BRTHRATE), correlates negatively (-.19), in the expected direction, with HSGRADS. <u>However</u>, HSGRADS correlates <u>negatively</u> with DISADVAN (-.34). The latter coefficient has a sign <u>opposite</u> what we would expect given our interpretation of DISADVAN as a reflection of traditional patterns of community organization and composition and our claim that dropping out and teen pregnancy can be explained in the same terms. Acknowledging that bivariate

correlations are often very misleading, this result is still troubling, since the correlation is not small and has a sign which is opposite what we expect.

In an earlier exploratory analysis, we included HSGRADS, as a measure of educational attainment, along with the other six modernity variables in our principal components analysis. HSGRADS' loading on the first principal component, which we now term MODERN, was .35. This is substantially lower than the loadings for the other variables, and, according to Stevens' (1993) criterion, the loading for HSGRADS was not statistically significant. Nevertheless, there is sufficient ambiguity concerning the meaning of DISADVAN and the MODERN component that their import should be interpreted with greater caution than suggested by much of the foregoing.

TENSION BETWEEN OPPORTUNITY AND COMMUNITY

The statistics which gave rise to the foregoing cautionary remarks may very well be indicators of a tension between opportunity and community. Specifically, we have noted that comparatively high levels of educational attainment are at odds with traditional patterns of social organization and composition. As a result, if we try to use MATRIC as as a measure of educational opportunity which would work against teen pregnancy, we may be overlooking

the fact that this same factor is associated with increases in teen pregnancy because it is at odds with tradition.

In a sense, MATRIC could be driving teen prenancy downware as a measure of opportunity, but driving it upward as a measure of departures from traditional patterns. This may explain the ambiguity noted in our cautionary remarks.

In our work with dropouts, the connection between high school completion and economic opportunity was always stronger and more certain than the connection between high school completion and educational opportunity. The former relationship was comparatively insensitive to model re-specifications and was interpretably stable from one data set to another. The latter relationship, however, was less robust and consistent. Perhaps we are beginning to see why.

Within the Appalachian state of West Virginia, economic opportunity is still tied closely to traditional mining and manufacturing jobs. Unfortunately, the number of such jobs has declined very sharply over the past two decades. However, where they still exist, they provide material support for them those wishing to live traditional community and family lives.

When adolescents respond to educational opportunites, however, they may be be doing so because traditional economic opportunities are missing, and they are preparing to leave. Those who remain behind may be living in socially and economically decimated areas.

DISCUSSION AND CONCLUSIONS

In previous work on dropouts in Florida and West Virginia, we provisionally concluded that high school students' decisions to stay in school or to drop out were based in part on, perhaps unself-conscious, reference to opportunities and costs of schooling. In the present paper, we have sought to apply a similar interpretation to teen pregnancy.

Using births to teenaged mothers as a proxy for our dependent variable of interest, we have sought to account for district-to-district variability in teen pregnancy. We have used a data set and a complement of independent variables taken from earlier work on district-to-district variability in high school completion rates.

Tentatively, we have concluded that the same factors which contribute to explaining dropping out or completing high school also contribute to explaining teen pregnancy. Specifically, the presence or absence of opportunities -- a

future -- and valued participation in a socially and culturally stable community, both in school and out of school, contribute to diminishing teenaged birth rates, much as they contributed to diminishing dropout rates.

Our results are inconsistent with the usual victim-blaming explanations of teen pregnancy which focus on characteristics of individuals, ignoring structurally determined contextual factors. Further, our findings suggest that commonplace explanations of teen pregnancy in Appalachia are simply wrong.

Rather than being a manifestation of welfare dependency and a debilitating culture of poverty, teen pregnancy reflects an absence of opportunity and the decline of traditional community patterns, the replacement of traditional social relations by shifting labor market relations.

Further, as traditonally small schools are replaced by larger schools, where curriculum tracking is pursued aggressively and a sense of valued membership and participation is harder to find, teen pregnancy becomes still more likely. As with dropouts, when opportunity and community become more difficult to find, teen pregnancy becomes more common.

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Our findings seem consistent with the judgment that teen pregnancy and teen births are more usefully construed as consequences of disadvantage and disruption, than as causes. Teen pregnancy and teen births may play both roles, but the former -- that of consequence or outcome -- seems more conspicuous.

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TABLE 1

DEFINITIONS OF ALL VARIABLES

Dependent Variable

BRTHRATE	Births per thousand females aged 10 to 19, in 1987.

Independent Variables

Economic Opportunities

WAGE	Average job wage in thousands.
UNEMPLOY	Average unemployment rate, as a percent of the total labor force.

Postsecondary Educational Opportunities

MATRIC	Percent of 1987 high school graduates who enrolled in a college or university.

Socioeconomic Composition

HOUSEINC	Average household income in thousands.
DISADVAN	Percent of all students receiving free or reduced-cost lunch.
EDAVG	Average level of educational attainment among the district's adult population over age 25.
URBAN	Percent of total population living in urban areas.

Ethnic Composition

BLACK	Percent of district population that is Black.
ETHNIC	Percent of district population that is neither Black nor White.

School Characteristics

CAPREV	Local, state, and federal revenue per capita for public schools in thousands.
STUDENTS	Number of elementary and secondary school students in thousands.
COUNKID	Number of public school counselors per thousand students.
RATIO	Student/teacher ratio.
COLLPREP	Percent of high school students in a college preparatory program.
HSGRADS	High school completion rate.

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TABLE 2

DESCRIPTIVE STATISTICS

	Means	Standard Deviations
BRTHRATE	106.19	162.63
WAGE	17.16	3.87
UNEMPLOY	7.46	2.95
MATRIC	34.65	9.32
URBAN	21.55	21.99
HOUSEINC	23.10	3.59
DISADVAN	44.07	13.54
EDAVG	11.26	2.14
BLACK	1.71	2.28
ETHNIC	0.26	0.52
CAPREV	3.19	4.02
STUDENTS	6.27	5.79
COUNKID	2.00	1.00
RATIO	18.57	1.66
COLLPREP	27.89	10.73
HSGRADS	80.71	12.29

TABLE 3

PRELIMINARY REGRESSION RESULTS

Unstandardized and (Standardized) Regression Coefficients
(Dependent Variable: Births Per Thousand Teen Females)

WAGE	-20.85** (-.47)
UNEMPLOY	8.26 (.17)
MATRIC	28.75 (.16)
HOUSEINC	-4.65 (-.10)
DISADVAN	-0.53* (-.44)
EDAVG	-2.28 (-.03)
URBAN	-0.91 (.12)
BLACK	-0.52 (-.01)
ETHNIC	41.65 (.13)
CAPREV	2.08 (.01)
STUDENTS	16.79** (.60)
COUNKID	-896.35 (-.03)
RATIO	-7.71 (-.08)
COLLPREP	0.08 (.03)
HSGRADS	-1.54 (-.12)
Adjusted R-Squared	37.6%
N	55

*P<.05
**P<.01

TABLE 5

REGRESSION RESULTS FOR DISADVAN

Unstandardized and (Standardized) Regression Coefficients
(Dependent Variable: Percent Free/Reduced-Cost Lunch)

EDAVG	-16.6 (-.21)
URBAN	-0.37 (-.06)
BLACK	-6.35 (-.12)
ETHNIC	42.13 (.18)
MATRIC	-29.93 (-.20)
COLLPREP	-0.39* (-.32)
Adjusted R-Squared	57.1%
N	55

*P<.05
**P<.01

TABLE 4

CORRELATION MATRIX

	EDAVG	BLACK	ETHNIC	MATRIC	COLLPREP	URBAN
EDAVG						
BLACK	.15					
ETHNIC	.11	.57**				
MATRIC	.26	.27*	.37*			
COLLPREP	.47**	.16	.20	.59**		
URBAN	.29*	.33*	.45**	.52**	.64**	
DISADVAN	-.52**	-.29*	-.27*	-.56**	-.68**	-.52**

*P<.05
**P<.01

TABLE 6

FACTOR MATRIX

	FACTOR 1	FACTOR2
EDAVG	.52	.46
BLACK	.58	-.64
ETHNIC	.64	-.58
MATRIC	.73	.16
COLLPREP	.74	.48
URBAN	.79	.09
Percent Variance Explained	43.1%	15.6%

TABLE 7

FINAL REGRESSION RESULTS

Unstandardized and (Standardized) Regression Coefficients
(Dependent Variable: Births Per Thousand Teen Females)

WAGE	-18.03** (-.43)
UNEMPLOY	4.89 (.09)
HOUSEINC	-3.04 (-.07)
CAPREV	-2.08 (-.01)
STUDENTS	14.21** (.51)
COUNKID	959.20 (.01)
RATIO	-5.84 (-.06)
MODERN	61.32* (.38)
Adjusted R-Squared	39.3%
N	55

*P<.05
**P<.01